PRIORITIES
OF THE CDC NATIONAL IMMUNIZATION PROGRAM

Reduce Vaccine-Preventable Diseases

Vaccine-preventable disease levels are at or near record lows

Childhood Vaccine-Preventable Disease Cases

The number of cases of most vaccine-preventable diseases are down approximately 96 percent or more from peak pre-vaccine levels.

Rubella

In 2001, only 19 cases (provisional data) of rubella were reported in the U.S. This record low number exemplified the success of the U.S. rubella vaccination program, which was initiated in 1969. Because rubella cases have mainly occurred among foreign-born adults in recent years, this success can also be attributed to the inclusion of rubella-containing vaccines in 37 of the 41 countries reporting to the PanAmerican Health Organization. Additionally, only two cases of congenial rubella syndrome (provisional data) were reported in 2001 to the CDC National Congenital Rubella Syndrome Registry.

Paralytic Polio

There have been no cases of polio caused by wild polio virus in the Western Hemisphere since 1991. We are actively working with the World Health Organization (WHO) to achieve the goal of certifying the global eradication of polio by 2005.

Measles

Measles is no longer endemic in the U.S. This means that all of the cases now seen in our country were either documented or believed to have been brought in from other countries. In 2001, there were 108 confirmed cases of measles (provisionally reported) in the U.S. and only 522 (provisionally reported) in the Western Hemisphere—down from 1760 cases in 2000. This represents more than a two-thirds reduction in the number of cases in the Americas in only one year.

Haemophilus influenzae type b

Cases of *Haemophilus influenzae* type b (Hib) have dropped more than 99 percent in children under five years of age since the introduction of the Hib vaccine in 1990 for use in infants. Before the widespread use of this vaccine, Hib had been the main cause of bacterial meningitis in children.

Smallpox

Smallpox was globally eradicated in 1977. However, because of concerns that the smallpox virus could be used as a bioterrorism weapon, the *CDC Smallpox Response Plan and Guidelines* were updated and made widely available to health officials, health care providers, and state and local government officials. The plan outlines how the CDC will work with state and local public officials to respond to a smallpox outbreak. It also provides direction to public health officials on smallpox containment and vaccine use.

Raise Immunization Coverage Levels

Immunization coverage levels are growing

Childhood Coverage

Outstanding progress has been made in coverage rates for children up to two years of age. Immunization levels for most individual vaccines such as measles, polio, Hib, hepatitis B, and three doses of diphtheria-tetanus-acellular pertussis (DTaP) are at 90 percent or higher.

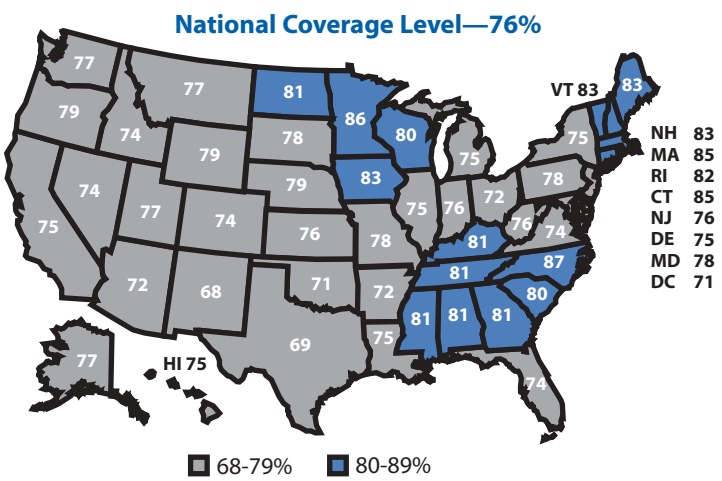
Racial and Ethnic Coverage

Disparities in immunization coverage rates among racial and ethnic groups have also been reduced. For example, in 1970 the measles immunization rate for racial and ethnic minority children was 10 percentage points lower than the rate for white children. By 2000, the measles disparity between white children and those of other racial and ethnic minority groups had dropped to 1.5 percentage points for Hispanic children and 3.5 percentage points for black children. Additionally, in 2000, the gap between white, non-Hispanic children, Hispanic children, and black children was less than 4 percentage points for Hib, hepatitis B, polio, and varicella vaccines.

Varicella Vaccine

Licensed in 1995, the varicella vaccine is one of the newest vaccines on the recommended childhood schedule. Great progress has been made in educating health care providers and the public about the benefits of this vaccine. Coverage jumped from 57.5 percent in 1999 to 68 percent in 2000—approximately a 15 percent increase in just one year. Coverage levels are expected to continue to increase.

Estimated Vaccination Coverage with the 4:3:1:3* Series, by Coverage Level and State



* Four or more doses of diphtheria-tetanus-pertussis (DTP) vaccine, three or more doses of poliovirus vaccine, one or more doses of measles-containing vaccine (MCV), and three or more doses of *Haemophilus influenzae* type b (Hib) vaccine.

Source: National Immunization Survey, 2000

Children surveyed in the 2000 National Immunization Survey were born between February 1997 and May 1999

Adult Coverage

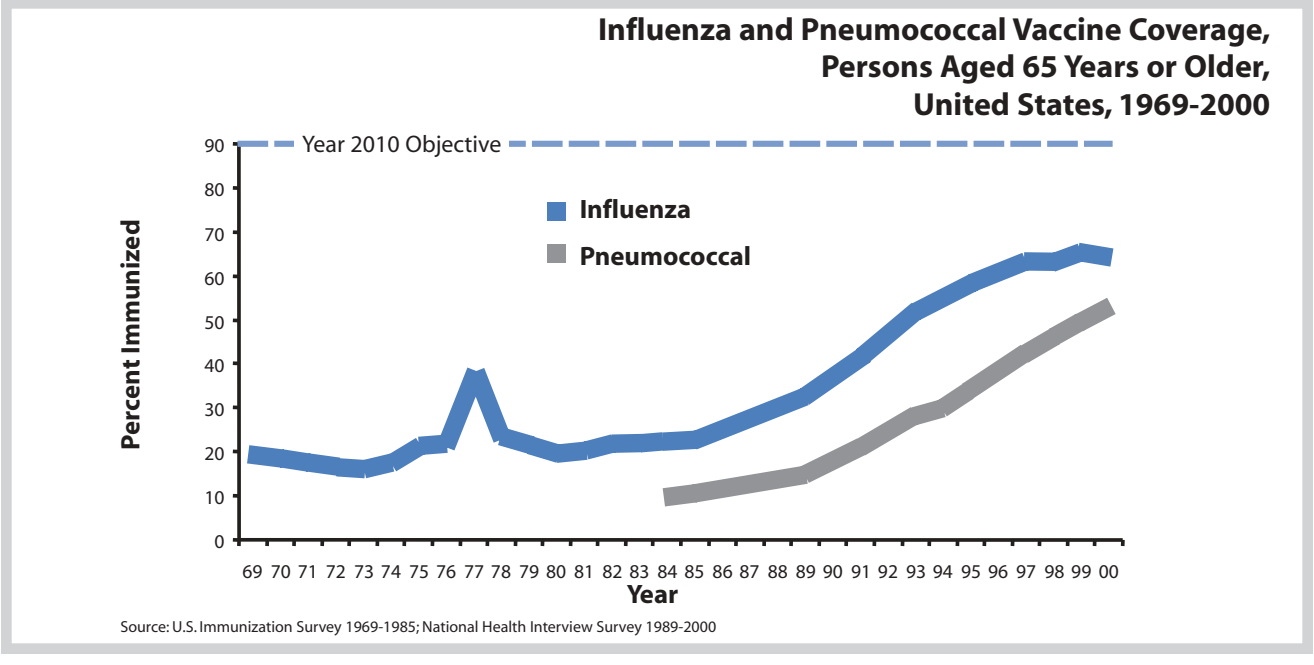
Many adults, especially senior citizens, are susceptible to a variety of vaccine-preventable diseases, including influenza, pnuemococcal diseases, and hepatitis. In fact, adults are 100 times more likely to die from vaccine-preventable diseases than children. The financial cost to our society because of low immunization rates in adults is also staggering. An estimated $10 billion in costs are incurred each year from illness, lost lives, hospitalization, and lost productivity from diseases that can be easily prevented. Fortunately, progress is being made to increase adult immunization levels and, hopefully, adult immunization levels will one day be as high as our childhood immunization levels.

Influenza Vaccine

Coverage in people 65 and older reached 64 percent in 2000, according to the CDC's National Health Interview Survey.

Pneumococcal Polysaccharide Vaccine

Coverage in people 65 and older reached 53 percent in 2000, according to CDC's National Health Interview Survey.



Source: U.S. Immunization Survey 1969-1985; National Health Interview Survey 1989-2000

Further Improve Vaccine Cost Effectiveness

Cost-savings continue to accrue.

Return on Investments

Measles-Mumps-Rubella (MMR) Vaccine

The U.S. saves over $13 for every dollar invested in the MMR vaccine—a savings of nearly $4.5 billion each year.

Diphtheria-Tetanus-acellular Pertussis Vaccine (DTaP)

For every dollar invested in the DTaP vaccine, the U.S. saves $27 in direct and indirect costs, such as work-loss, death, and disability.

Perinatal Hepatitis B Vaccine

For every dollar invested in giving the hepatitis B vaccine to infants at birth to 2 months of age, the U.S. saves $14.70 in direct and indirect costs.

CDC Vaccine Contracts

The National Immunization Program negotiates vaccine purchase contracts on behalf of the states. Through these contracts, states can then use both federal grant funds and state funds to purchase vaccines. The Centers for Disease Control and Prevention is able to negotiate significant price discounts due to the large quantities of vaccines purchased. For example, in 2000, 52 percent of all vaccines distributed in the U. S. were purchased through CDC contracts. Compared to what would have been paid at private-sector vaccine prices, these consolidated vaccine purchase contracts saved taxpayers over $1.3 billion during the last two years.

Adult Immunization

Adult vaccines play a critical role in improving the health of our country and in reducing our county's health care costs. For example, if we did not have the influenza vaccine, the direct medical costs and time lost from work is estimated to cost the U.S. over $10 billion a year. That is the financial benefit from just one vaccine. Additional vaccines are available to protect adults from many other debilitating diseases such as hepatitis A and B and pneumococcal diseases—all are responsible for lost time and productivity from work as well as rising health care costs.